



ResinFormulators

INNOVATIVE MATTERS

RF 4010



RF 4010 is medium viscosity modified bisphenol A epoxy. Versions of RF 4010 are available with different viscosities. It is suitable for laminating, potting and VARTM/RTM applications. The diluent in RF 4010 was chosen to minimize the effect on Tg, chemical resistance and reduce skin irritation. It does not contain butyl glycidyl ether (BGE) or cresyl glycidyl ether (CGE). The cured properties of RF 4010 will depend on the choice of hardener. RF 4010 is also available with color pigments.

HANDLING PROPERTIES, TYPICAL

PROPERTY

RF 4010

Mix Ratio with RF 61:	100:55-56
Mixed Color	Clear
Viscosity @ 77°F (25°C), 4010, cps	3500 - 4500
Viscosity @ 77°F (25°C), Mod 1, cps	1500 - 1700
Specific Gravity @ 77°F (25°C)	1.16

USES & APPLICATIONS

RF 4010 is a medium viscosity, unfilled, clear general purpose epoxy resin for potting, laminating, and casting applications.

POPULAR FOR USE IN:



ELECTRONICS



AEROSPACE

PHYSICAL PROPERTIES, TYPICAL CURED PERFORMANCE WITH RF 61

PROPERTY

TEST METHOD

UNIT

VALUE

Al-Al Lap Shear (25°C)	ASTM D1002	psi	3400
DSC Tg	ASTM E1356	°C	52
DSC Tg (60C post cure)	ASTM E1356	°C	69
CTE (below Tg)	ASTM E831	ppm/°C	76
Volume Resistivity	ASTM D257	Ohm-cm	6x10E14
Pot Life			1-2 hours

ABOUT RF 61

RF 61 is a standard low viscosity polyamide hardener for general purpose potting. It offers good adhesion to a wide variety of substrates, excellent mechanical properties and flexible mix ratio.

SPECIALTY PACKAGING AND DISPENSING

Material is suitable for pre-mixed and frozen, barrier cartridges, side-by-side cartridges, and bulk packaging use.

COMMITMENT TO QUALITY AND SERVICE

GracoRoberts and Resin Formulators are fully qualified to design, manufacture, and distribute products to a variety of industries.

Certifications:

- ISO9001:2015
- AS9100 (Rev. D)
- AS9120 (Rev. B)

LEARN MORE: Download the TDS or SDS from our TDS SDS Library »

See reverse for other suggested curing agents.



PHYSICAL PROPERTIES, TYPICAL CURED PERFORMANCE WITH RF 9

PROPERTY	TEST METHOD	UNIT	VALUE
Al-Al Lap Shear	ASTM D1002	psi	4800
DSC Tg	ASTM E1356	°C	86
DSC Tg (93°C post cure)	ASTM E1356	°C	96
CTE (below Tg)	ASTM E831	ppm/°C	60
Volume Resistivity	ASTM D257	Ohm-cm	5x10E14
Pot Life			30-45 mins

Mix Ratio: 100:23

ABOUT RF 9

RF 9 is an accelerated polyamide hardener for general purpose potting.

PHYSICAL PROPERTIES, TYPICAL CURED PERFORMANCE WITH RF 14

PROPERTY	TEST METHOD	UNIT	VALUE
DSC Tg	ASTM E1356	°C	86
DSC Tg (93°C post cure)	ASTM E1356	°C	96
CTE (below Tg)	ASTM E831	ppm/°C	60
Volume Resistivity	ASTM D257	Ohm-cm	5x10E14
Pot Life			20-30 mins

Mix Ratio: 100:15

ABOUT RF 14

RF 14 is a standard polyamine with reduced vapor pressure. It gives castings with intermediate Tg and excellent chemical resistance.

PHYSICAL PROPERTIES, TYPICAL CURED PERFORMANCE WITH RF 24

PROPERTY	TEST METHOD	UNIT	VALUE
DSC Tg	ASTM E1356	°C	131
CTE (below Tg)	ASTM E831	ppm/°C	66
Volume Resistivity	ASTM D257	Ohm-cm	6x10E14
Pot Life			1-2 hours

Mix Ratio: 100:33

ABOUT RF 24

RF 24 is a long pot life cycloaliphatic hardener for high temperature potting. It is an excellent substitute for aromatic hardeners and can generate Tg's in excess of 150°C with post cure.

LEARN MORE: Download the TDS or SDS from our TDS SDS Library »